

Claims:

1. A detergent comprising:
 - a) 0.001% to 40% w/v of a bactericidally active water-insoluble cationic
5 compound in its salt form wherein the counterion anion has at least one of the following properties:
 - 1) can generate a water-insoluble salt form, by water-insoluble we mean
that less than 10% w/v dissolves in deionised water at 20°C, preferably less
10 than 1%w/v;
 - 2) has a MW of less than 300, (preferably less than 200) but greater than 50 (preferably greater than 75),
 - 15 3) the dissociation constant (Kd) of the salt is less than 10^{-3} , preferably less than 10^{-6} ;
 - b) 0.001 to 40% w/v of an anionic surfactant; and
 - c) up to 98% w/v of water.
- 20 2. A detergent composition as claimed in claim 1 which additionally comprises 0.001 to 30% w/v of a non-ionic surfactant.
3. A detergent composition as claimed in claim 1 and 2 which additionally
25 comprises 0.001 to 10% w/v of a superwetting agent.
4. A detergent composition as claimed in claim 3 wherein the super wetting agent is
able to lower the surface tension of water to below 25 mN/m at concentrations of
0.0001 to 1% w/v.
- 30 5. A detergent composition as claimed in claims from 1 to 3 which additionally
comprises 0.001% to 15% of a water-miscible organic solvent.

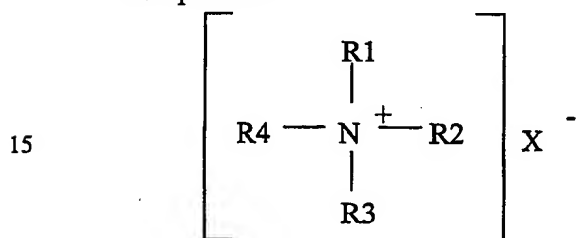
6. A detergent composition as claimed in claims 1 to 5 which additionally comprises 0.01-5%w/v of a chelating agent, 0.01-30%w/v of a polymer and up to 2%w/v of minor ingredients selected from perfumes, dyes, preservatives and antifoaming agents

5

7. A detergent composition described in claims 1 to 6 additionally comprises from 0.001 to 1%w/v of an additional bactericidally active product selected from essential oils (tea tree oil, citronella oil and thyme oil), phenols, alcohols, halogens, aldehydes and acids.

10

8. A detergent composition as claimed in any claim from 1 to 7 wherein the cationic compound is

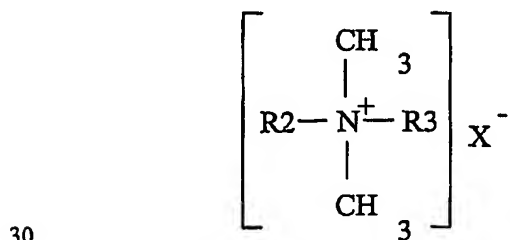


wherein R1, R2, R3 and R4 are independently selected from alkyl, aryl or alkylaryl substituent of from 1 to 26 carbon atoms straight chained or branched and may include one or more amide, ether or ester linkages, and the entire cation portion of the molecule has a molecular weight of at least 165 and X is the counterion anion.

20

9. A detergent composition as claimed in claim 8 wherein the cationic compound is

25



wherein R2 and R3 are each independently the same or different C8 -C12 alkyl; or R2 is selected from C12-16 alkyl, C8-18 alkylethoxy or C8-18

-30 -

alkylphenoxyethoxy and R3 is benzyl and X is the counterion anion.

10. A detergent composition as claimed in claim 7 or claim 8 wherein X⁻ is selected from saccharinate, alkyl and alkyl benzene sulfate, sulfonate and fatty acid.

5

11. Use of a bactericidally active water-insoluble cationic compound in its salt form, wherein the counterion anion has at least one of the following properties:

1) can generate a water-insoluble salt form, by water-insoluble we mean
10 that less than 10% w/v dissolves in deionised water at 20°C, preferably less than 1%w/v;

2) has a MW of less than 300, preferably less than 200 but greater than
15 50, preferably greater than 75;

3) the dissociation constant (K_d) of the salt is less than 10⁻³, preferably
less than 10⁻⁶;

as a bactericidally active component of a fabric treatment composition comprising
from 0.001 to 40% w/v of an anionic surfactant.

20